

**Amendments to the Claims:**

The listing of claims will replace all prior versions and listings of claims in the application:

**Listing of Claims:**

1-6: (canceled)

7. (currently amended): A The method of claim 6, for determining formaldehyde, which comprises bringing glutathione-dependent formaldehyde dehydrogenase having an optimal pH of about 7.5 to about 8.5 and having a ratio of reactivity with thio-NAD to reactivity with NAD of not less than 0.3, glutathione and an oxidized coenzyme into contact with a sample, and analyzing a compound resulting from the enzymatic reaction, wherein the glutathione-dependent formaldehyde dehydrogenase is derived from *Hansenula nonfermentans* IFO1473.

8. (currently amended): A method for determining formaldehyde, which comprises bringing glutathione-dependent formaldehyde dehydrogenase having a ~~ration~~ ratio of reactivity with thio-NAD to reactivity with NAD of not less than 0.3 ~~30%~~, glutathione, one compound selected from the group consisting of thio-NADs and thio-NADPs, and one compound selected from the group consisting of reduced NADs and reduced NADPs into contact with a sample to allow cycling reaction and analyzing changes in the amount of a compound due to the reaction.

9. (currently amended): A method for determining formaldehyde, which comprises bringing glutathione-dependent formaldehyde dehydrogenase having a ratio of reactivity with thio-NAD to reactivity with NAD of not less than 0.3 30%, glutathione, one compound selected from the group consisting of reduced thio-NADs and reduced thio-NADPs , and one compound selected from the group consisting of NADs and NADPs into contact with a sample to allow cycling reaction and analyzing changes in the amount of a compound due to the reaction.

10. (previously presented): The method of claim 8, wherein the amount of the reduced thio-NADP or reduced thio-NAD compound is analyzed.

11. (currently amended): The method of ~~any~~ of claim ~~1~~ 7 , wherein a minimum detection limit of the formaldehyde is not more than  $1\mu\text{mol/L}$ .

12. (currently amended): The method ~~of any~~ of claim 8, wherein a minimum detection limit of the formaldehyde is not more than  $1\mu\text{mol/L}$ .

13. (currently amended): ~~The~~ A method for determining a biological component, ~~which comprises, in the measurement of a biological component~~ that produces formaldehyde as a reaction intermediate, comprising measuring produced formaldehyde by the method of claim ~~1~~ 7.

14. (currently amended): The method for determining a biological component, ~~which comprises, in the measurement of a biological component~~ that produces formaldehyde as a reaction intermediate, comprising measuring produced formaldehyde by the method of claim 8.

15. (currently amended): A method for determining homocysteine, which comprises bringing betaine, betaine-homocysteine methyltransferase, dimethylglycine oxidase and, where necessary, sarcosine oxidase into contact with a sample, and measuring, according to the method of claim ~~1~~ 7, formaldehyde produced by the enzymatic reactions.

16. (previously presented): A method for determining homocysteine, which comprises bringing betaine, betaine-homocysteine methyltransferase, dimethylglycine oxidase and, where necessary, sarcosine oxidase into contact with a sample, and measuring, according to the method of claim 8, formaldehyde produced by the enzymatic reactions.

17. (currently amended): A method for determining creatine or creatinine, which comprises reacting creatine amidinohydrolase, sarcosine oxidase, and where necessary, creatinine amidohydrolase ~~amidohydrolase~~ and measuring, according to the method of claim ~~1~~ 7, formaldehyde produced by the enzymatic reactions.

18. (currently amended): A method for determining creatine or creatinine, which comprises reacting creatine ~~amidohydrolase~~ ~~amidodhydrolase~~, sarcosine oxidase, and where necessary, creatinine ~~amidohydrolase~~ ~~amidodhydrolase~~ and measuring, according to the method of claim 8, formaldehyde produced by the enzymatic reactions.

19 and 20: (canceled)

21. (currently amended): A method for determining homocysteine, which comprises ~~brining~~ bringing a transferase utilizing homocysteine and ~~other~~ another compound as a pair of substrates and said ~~other~~ another compound into contact with a sample and measuring the resulting compound and wherein said transferase and said ~~other~~ another compound is a combination selected from the group consisting of betaine-homocysteine methyltransferase and betaine, betaine-homocysteine methyltransferase and dimethylthetin, homocysteine methyltransferase and S-adenosylmethionine, and N5-methyltetrahydrofolate-homocysteine methyltransferase and N5-methyltetrahydrofolate, and the resulting compound is methionine, and wherein the betaine, betaine-homocysteine methyltransferase, dimethylglycine oxidase and, where necessary, sarcosine oxidase are brought into contact with a sample, hydrogen peroxide produced by the enzymatic reactions is reacted with hydrogen donor chromogenic reagent and, where necessary, coupler, in the presence of peroxidase, and the resulting pigment is measured.

22. (currently amended): The method of claim 21, wherein the dimethylglycine oxidase is an enzyme stable to a thiol compound.

23. (currently amended): The method of claim 22, wherein the thiol compound is at least one kind selected from the group consisting of dithiothreitol, dithioerythritol, 2-mercaptoethanol, 2-mercaptoethanesulfonate, 2-mercaptoethylamine, cysteine, homocysteine, N-acetylcysteine, thioglycerol, ~~thioglycerol~~, thioglycolic acid, reduced glutathione and salts thereof.

24. (previously presented): The method of claim 22, wherein the thiol compound is dithiothreitol.

25. (currently amended): The method of claim 22, wherein the dimethylglycine oxidase shows an enzyme activity ~~retained at least by 50%~~ in the presence of 0.05 mmol/L dithiothreitol of at least 50% of relative to the enzyme activity in the absence of dithiothreitol.

26. (currently amended): The method of claim 22, wherein the dimethylglycine oxidase is an enzyme having the following physico-chemical properties: action: acting on dimethylglycine in the presence of oxygen to produce sarcosine, ~~formalhyde~~ formaldehyde and hydrogen peroxide, and Km value for dimethylglycine: not more than 15 mM.

27. (previously presented): The method of claim 22, wherein the dimethylglycine oxidase is derived from a microorganism.

28. (currently amended): The method of claim 27, wherein the dimethylglycine oxidase is derived from a microorganism belonging to the genus *Arthrobacter* or the genus *Streptomyces*.

29. (currently amended): The method of claim 28, wherein ~~to~~ the dimethylglycine oxidase is derived from *Arthrobacter nicotianae* IFO14234 or *Streptomyces mutabilis* IFO12800 ~~IF012800~~.

30. (previously presented): The method of claim 21, wherein the betaine, betaine-homocysteine methyltransferase, dimethylglycine oxidase and, where necessary, sarcosine oxidase are brought in contact with a sample, formaldehyde produced by the enzymatic reactions is reacted with glutathione, glutathione-dependent formaldehyde dehydrogenase and oxidized coenzyme and the resulting reduced coenzyme is measured.

31. (currently amended): The method of claim 30, wherein the dimethylglycine oxidase is an enzyme stable to a thiol compound.

32. (currently amended): The method of claim 31, wherein the thiol compound is at least one kind selected from the group consisting of dithiothreitol, dithioerythritol, 2-mercaptoethanol, 2-

mercaptoethanesulfonate, 2-mercaptoethylamine, cysteine, homocysteine, N-acetylcysteine, thioglycerol, ~~thioglycerol~~, thioglycolic acid, reduced glutathione and salts thereof.

33. (previously presented): The method of claim 31, wherein the thiol compound is dithiothreitol.

34. (currently amended): The method of claim 31, wherein the dimethylglycine oxidase shows an enzyme activity ~~retained at least by 50%~~ in the presence of 0.05 mmol/L dithiothreitol of at least 50% of relative to the enzyme activity in the absence of dithiothreitol.

35. (previously presented): The method of claim 31, wherein the dimethylglycine oxidase is an enzyme having the following physico-chemical properties:

action: acting on dimethylglycine in the presence of oxygen to produce sarcosine, formaldehyde and hydrogen peroxide, and Km value for dimethylglycine: not more than 15 mM.

36. (currently amended): The method of claim 31, wherein the dimethylglycine oxidase is derived from a microorganism.

37. (currently amended): The method of claim 36, wherein the dimethylglycine oxidase is derived from a microorganism belonging to the genus *Arthrobacter* or the genus *Streptomyces*.

38. (currently amended): The method of claim 37, wherein the dimethylglycine oxidase is derived from *Arthrobacter nicotianae* IFO14234 ~~IF014234~~ or *Streptomyces mutabilis* IFO12800 ~~IF012800~~.

39. (currently amended): The method of claim 21, wherein the betaine, betaine-homocysteine; methyltransferase, dimethylglycine oxidase and, where necessary, sarcosine oxidase are brought in contact with a sample, formaldehyde produced by the enzymatic reactions is reacted with glutathione, glutathione-dependent formaldehyde dehydrogenase and oxidized coenzyme and the resulting reduced coenzyme is measured.

40. (currently amended): The method of claim 39, wherein the dimethylglycine oxidase is an enzyme stable to a thiol compound.

41. (currently amended): The method of claim 40, wherein the thiol compound is at least one kind selected from the group consisting of dithiothreitol, dithioerythritol, 2-mercaptoethanol, 2-mercaptoethanesulfonate, 2-mercaptoethylamine, cysteine, homocysteine, N-acetylcysteine, thioglycerol, ~~thioglycerol~~, thioglycolic acid, reduced glutathione and salts thereof.

42. (previously presented): The method of claim 40, wherein the thiol compound is dithiothreitol.



43. (currently amended): The method of claim 40, wherein the dimethylglycine oxidase shows an enzyme activity ~~retained at least by 50%~~ in the presence of 0.05 mmol/L dithiothreitol of at least 50% of relative to the enzyme activity in the absence of dithiothreitol.

44. (previously presented): The method of claim 40, wherein the dimethylglycine oxidase is an enzyme having the following physico-chemical properties: action: acting on dimethylglycine in the presence of oxygen to produce sarcosine, formaldehyde and hydrogen peroxide, and Km value for dimethylglycine: not more than 15 mM.

45. (previously presented): The method of claim 40, wherein the dimethylglycine oxidase is derived from a microorganism.

46. (previously presented): The method of claim 45, wherein the dimethylglycine oxidase is derived from a microorganism belonging to the genus *Arthrobacter* or the genus *Streptomyces*.

47. (currently amended): The method of claim 46, wherein the dimethylglycine oxidase is derived from *Arthrobacter nicotianae* IFO14234 ~~IF014234~~ or *Streptomyces mutabilis* IFO12800 ~~IF012800~~.

48. (previously presented): The method of claim 40, wherein a minimum detection limit of the homocysteine is not more than 1  $\mu$ mol/L.

49. (currently amended): Glutathione-dependent formaldehyde dehydrogenase having the following physico-chemical properties: action: acting on formaldehyde in the presence of one coenzyme selected from the group consisting of NADs, NADPs, thio-NADs and thio-NADPs, reduced glutathione to produce S-formylglutathione, a reduced coenzyme, a ratio of reactivity with thio-NAD to reactivity with NAD: not less than 0.3 ~~30%~~, optimal pH: about 7.5- about 8.5, pH stability: about 6.0-about 9.0, and heat stability: about 40° C or less.

50. (previously presented): The glutathione-dependent formaldehyde dehydrogenase of claim 49, which is derived from a microorganism.

51. (previously presented): The glutathione-dependent formaldehyde dehydrogenase of claim 50, which is derived from methylotrophic yeast.

52. (previously presented): The glutathione-dependent formaldehyde dehydrogenase of claim 51, which is derived from *Hansenula* yeast.

53. (currently amended): The glutathione-dependent formaldehyde dehydrogenase of claim 52, which is derived from *Hansenula nonfermentans* IFO14234 ~~IF014234~~.

54. (currently amended): Dimethylglycine oxidase having the following physico-chemical properties: action: acting on dimethylglycine in the presence of oxygen to produce sarcosine, formaldehyde and hydrogen peroxide, an enzyme activity ~~is retained at least by 50%~~ in the presence of 0.05 mmol/L dithiothreitol ~~relative to~~ of at least 50% of the enzyme activity in the absence of dithiothreitol, and Km value for ~~dimethylglycine~~ dimethylglycine: not more than 15 mM.

55. (previously presented): The dimethylglycine oxidase of claim 54, which is derived from a microorganism.

56. (previously presented): The dimethylglycine oxidase of claim 55, which is derived from a microorganism belonging to the genus *Arthrobacter* or the genus *Streptomyces*.

57. (previously presented): The dimethylglycine oxidase of claim 56, which is derived from *Arthrobacter nicotianae* IFO14234, or *Streptomyces mutabilis* IFO12800.

58. (currently amended): A reagent kit for formaldehyde determination, which comprises at least buffer, glutathione, glutathione-dependent formaldehyde dehydrogenase having a ratio of reactivity with thio-NAD to reactivity with NAD of not less than 0.3 ~~30%~~ and a reagent for analyzing a compound produced by the enzymatic reaction.

59. (currently amended): The reagent kit for formaldehyde determination of claim 58, wherein the glutathione-dependent formaldehyde dehydrogenase has the following physico-chemical properties: action: production of S-formylglutathione and reduced coenzyme by action on formaldehyde in the presence of one oxidized coenzyme selected from the group consisting of NADs, NADPs, thio-NADs and thio-NADPs and reduced glutathione; optimal pH: about 7.5- about 8.5; pH stability: about 6.0-about 9.0; and heat stability: about 40°C or less.

60. (currently amended): A reagent kit for formaldehyde determination, which comprises at least a buffer, glutathione, glutathione-dependent formaldehyde dehydrogenase having a ratio of reactivity with thio-NAD to reactivity with NAD of not less than 0.3 ~~30%~~, one compound selected from the group consisting of thio-NADs and thio-NADPs, and one compound selected from the group consisting of reduced NADs and reduced NADPs.

61. (currently amended): The reagent kit for formaldehyde determination of claim 60, wherein the glutathione-dependent formaldehyde dehydrogenase has the following physico-chemical properties: action: production of S-formylglutathione and reduced coenzyme by action on formaldehyde in the presence of one oxidized coenzyme selected from the group consisting of NADs, NADPs, thio-NADs and thio-NADPs and reduced glutathione; optimal pH: about 7.5- about 8.5; pH stability: about 6.0-about 9.0; and heat stability: about 40°C or less.

62. (currently amended): A reagent kit for formaldehyde determination, which comprises at least a buffer, glutathione, glutathione-dependent formaldehyde dehydrogenase having a ratio of reactivity with thio-NAD to reactivity with NAD of not less than 0.3 30%, one compound selected from the group consisting of reduced thio-NADs and reduced thio-NADPs, and one compound selected from the group consisting of NADs and NADPs.

63. (currently amended): The reagent kit for formaldehyde determination of claim 62, which comprises at least buffer, glutathione, glutathione-dependent formaldehyde dehydrogenase having a ratio of reactivity with thio-NAD to reactivity with NAD of not less than 30%, one compound selected from the group consisting of reduced thio-NADs and reduced thio-NADPs, and one compound selected from the group consisting of NADs and NADPs wherein the glutathione-dependent formaldehyde dehydrogenase has the following physico-chemical properties: action: production of S-formylglutathione and reduced coenzyme by action on formaldehyde in the presence of one oxidized coenzyme selected from the group consisting of NADs, NADPs, thio-NADs and thio-NADPs and reduced glutathione; optimal pH: about 7.5- to about 8.5; pH stability: about 6.0- to about 9.0; and heat stability: about 40°C or less.

64. (previously presented): A reagent kit for homocysteine determination, which comprises, in addition to the reagent of claim 58, betaine, betaine-homocysteine methyltransferase, dimethylglycine oxidase and, where necessary, sarcosine oxidase.

65. (previously presented): A reagent kit for homocysteine determination, which comprises, in addition to the reagent of claim 60, betaine, betaine-homocysteine methyltransferase, dimethylglycine oxidase and, where necessary, sarcosine oxidase.

66. (previously presented): A reagent kit for homocysteine determination, which comprises, in addition to the reagent of claim 62, betaine, betaine-homocysteine methyltransferase, dimethylglycine oxidase and, where necessary, sarcosine oxidase.

67. (currently amended): A reagent kit for creatinine or creatine determination, which comprises, in addition to the reagent of claim 58, creatinine amidohydrolase ~~creatinine amidohydrolase~~, sarcosine oxidase and, where necessary, creatinine amidohydrolase.

68. (currently amended): A reagent kit for creatinine or creatine determination, which comprises, in addition to the reagent of claim 60, creatine amidohydrolase ~~amidohydrolase~~, sarcosine oxidase and, where necessary, creatinine amidohydrolase.

69. (currently amended): A reagent kit for creatinine or creatine determination, which comprises, in addition to the reagent of claim 62, creatine amidohydrolase ~~amidohydrolase~~, sarcosine oxidase and, where necessary, creatinine amidohydrolase.

70. (currently amended): A reagent kit for homocysteine determination, which comprises at least a buffer, transferase utilizing homocysteine and ~~other~~ another compound as a pair of substrates, ~~said other compound~~, and a reagent for analyzing a compound produced by ~~the enzymatic~~ a reaction of the transferease utilizing homocysteine and said another compound as the substrates.

71. (currently amended): The reagent kit for homocysteine determination of claim 70, wherein the transferase and said other compound are a combination selected from the group consisting of betaine-homocysteine methyltransferase and betaine, betaine-homocysteine methyltransferase and ~~dimethylthein~~ dimethylthetin, homocysteine methyltransferase and S-adenosylmethionine and N5-methyltetrahydrofolate-homocysteine methyltransferase and N5-methyltetrahydrofolate, and the produced compound is methionine.

72. (currently amended): A reagent kit for homocysteine determination, which comprises a buffer, betaine, ~~betaine-homocystein~~ betaine-homocysteine methyltransferase, dimethylglycine oxidase ~~and, where necessary, sarcosine oxidase~~, and a reagent for measuring hydrogen peroxide produced by the enzymatic reactions.

73. (currently amended): The reagent kit of claim 72, wherein the reagent for measuring hydrogen peroxide comprises peroxidase, and a hydrogen donor chromogenic reagent ~~and, where necessary, coupler~~.

74. (currently amended): The reagent for of claim 72, wherein the dimethylglycine oxidase has the following physico-chemical properties: action: acting on dimthylglycine in the presence of oxygen to produce sarcosine, formaldehyde and hydrogen peroxide, an enzyme activity is retained at least by 50% in the presence of 0.05 mmol/L dithiothreitol relative to the enzyme activity in the absence of dithiothreitol, and ~~Km~~ rate value for dimethylglycine: not more than 15 mM.

75. (currently amended): A reagent kit for homocysteine determination, which comprises betaine, betine-homocysteine ~~mehtyltransferase~~ methyltransferase, dimethylglycine, oxidase ~~and, where necessary, sarcosine oxidase~~, and a reagent for determination of formaldehyde produced by the enzymatic reactions.

76. (previously presented): The reagent kit of claim 75, which comprises formaldehyde dehydrogenase and oxidized coenzyme as reagents for determination of the formaldehyde.

77. (previously presented): The reagent kit of claim 75, which comprises glutathione, glutathione-dependent formaldehyde dehydrogenase and oxidized coenzyme as reagents for determination of the formaldehyde.

78. (currently amended): The reagent kit of claim 75, wherein the dimethylglycine oxidase has the following physico-chemical properties: action: acting on dimethylglycine in the presence of oxygen



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to produce sarcosine, formaldehyde and hydrogen peroxide; ~~an~~ enzyme activity; an enzyme activity  
~~is retained at least by 50%~~ in the presence of 0.05 mmol/L dithiothreitol ~~relative to~~ of at least 50%  
of the enzyme activity in the absence of dithiothreitol; and Km value for dimethylglycine: not more  
than 15 mM.

79. (new): The reagent kit of claim 72, further comprising sarcosine oxidase.

80. (new): The reagent kit of claim 72, further comprising a coupler.

81. (new): The reagent kit of claim 75, further comprising sarcosine oxidase.